

**REMARKS**

Claims 2-9 are all the claims pending in the application.

Claims 2-4, 6 and 7 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by the article titled "Nanocorundum - Advanced Synthesis and Processing" by Krell et al.

Additionally, Claims 2-4 and 6-9 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as allegedly obvious over the article titled "Nanocorundum - Advanced Synthesis and Processing" by Krell et al.

Applicants submit that these rejections should be withdrawn because Krell et al. does not disclose or render obvious the method of the present invention.

Claim 2 recites:

2. A method for producing an  $\alpha$ -alumina powder comprising steps of:  
mixing an aluminum salt with a seed crystal by a method in which the  
aluminum salt is added to a solvent to obtain a solution or slurry, the seed crystal  
is added to said solution or slurry, and the solvent is then removed, and  
calcining the resulting mixture at 600-890°C.

The above claim should be read in its entirety. Here, while the claim does recite a method "comprising steps of..." it also specifies that the mixture to be calcined is "the resulting mixture" from the previous step. The mixture resulting from the previous step - - that is, the mixture resulting from mixing an aluminum salt with a seed crystal by a method in which the aluminum salt is added to a solvent to obtain a solution or slurry, the seed crystal is added to said

solution or slurry, and the solvent is then removed - - does not include a hydrolysis step, partial or otherwise, as taught by Krell et al.

Further, Krell et al. discloses a seeded precursor obtained by partially hydrolyzing a solution at 75° C by dropwise addition of a concentrated ammonia solution. *See* pages 1142-1143. Thus, the material to be calcined in Krell et al., the seeded precursor, is a partial hydrolysate. This partial hydrolysate is chemically different from Applicants' mixture of Claim 2.

Claims 3-9 depend directly or indirectly from claim 2. In this regard, Krell et al. fails to anticipate or render obvious claims 3-9 for at least the same reasons as Claim 2.

In view of the above. It is respectfully submitted that Claims 2-9 are patentable over Krell et al.

Double Patenting: Applicants note with appreciation that the terminal disclaimer filed on September 1, 2006 has overcome the non-statutory type double patenting rejection. *See* present Office Action, page 8. However, the Examiner states that the allegedly conflicting application (SN 11/079,163) may possibly still be used in a 103(a) rejection if the conflicting application is available as prior art under either 35 U.S.C. 102(f) or (g). *Id.* Further, the Examiner states that in order to avoid this type of 103(a) rejection, Applicants must either show that the conflicting inventions were commonly owned at the time of the invention was made, or name the prior inventor of the conflicting subject matter. *See* present Office Action, pages 8-9.

Statement of Common Ownership: In response, Applicants state that the present application and U.S. Patent Application No 11/079,163 were commonly owned at the time the present invention was made by Sumitomo Chemical Company, Ltd.

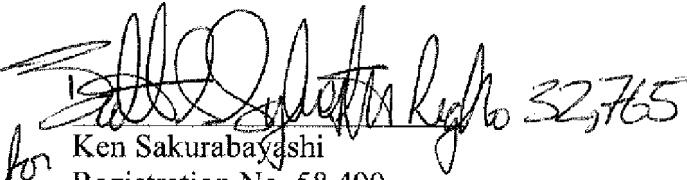
RESPONSE UNDER 37 C.F.R. § 1.116  
Application No.: 10/784,826  
Attorney Docket No.: Q79934

In addition, Applicants submit herewith, a copy of the Assignment of U.S. Patent Application No. 11/079,163, to Sumitomo Chemical Company, Ltd.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
for Ken Sakurabayashi  
Registration No. 58,490

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: October 9, 2007